



Factsheet: Sewer Backflow Prevention

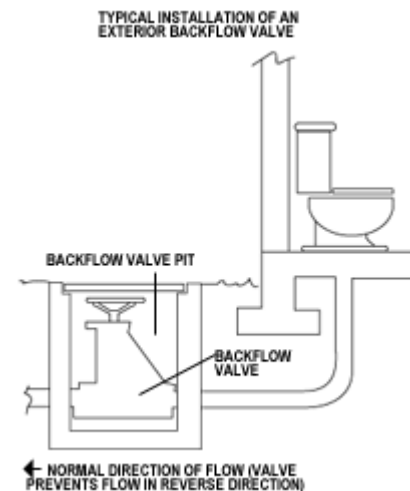
There are actions you can take to protect your family and keep your property losses to a minimum.

Are You at Risk?

If you aren't sure whether your house is at risk from flooding, check with the **DC Floodplain Manager, (202) 535-2248**. This official can determine whether you are in a flood hazard area. Also, you can request information on how to protect your property from flood damage.

What You Can Do

Flood protection can involve a variety of changes to your house and property -- changes that can vary in complexity and cost. You may be able to make some types of changes yourself. However, complicated or large-scale changes and those that affect the structure of your house or its electrical wiring and plumbing should be completed by a professional contractor licensed to work in the District of Columbia... One example of flood protection is installing a backflow valve to prevent sewage from backing up into your house. A licensed plumber or contractor should install this device.



Install Sewer Backflow Valves

In some floodprone areas, flooding causes sewage from sanitary sewer lines to back flow into houses through drain pipes. These backups cause damage that is difficult to repair and create health hazards.

One solution for protecting your house from sewage backups is to install backflow valves, which are designed to block drain pipes temporarily and prevent flow into the house. Backflow valves are available in a variety of designs that range from the simple to the complex. The figure shows a gate valve, one of the more complex designs. It provides a strong seal, but must be operated by hand. So the effectiveness of a gate valve will depend on how much warning you have of impending flooding. Among the simpler valves are flap or check valves, which open to allow flow out of the house but close when the flow reverses. These valves operate automatically but do not provide as strong a seal as a gate valve.

Tips

Keep these points in mind if you have backflow valves installed:

- A licensed contractor must correctly complete changes to the plumbing in your house, in accordance with all applicable codes. This is important for your safety!
- Some valves incorporate the advantages of both flap and gate valves into a single design. Your plumber or contractor can provide advice on the relative advantages and disadvantages of the various types of backflow valves.

- Valves should be installed on all pipes that leave the house or that are connected to equipment that is below the potential flood level. Also, valves may be needed on washing machine drain lines, laundry sinks, fuel oil lines, rain downspouts, and sump pumps, as well as sewer/septic connections.
- If you have a sump pump, it may be connected to underground drain lines, which may be difficult to seal off.

Estimated Cost

Having a plumber or contractor install one backflow valve will cost you about \$525 for a combined gate/flap valve or about \$375 for a flap valve. These figures include the cost of excavation and back-filling.

Contact the District of Columbia Emergency Management Agency, Hazard Mitigation Officer on (202) 673-2101 ext. 1163 for additional information regarding personal preparedness and protection measures.